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UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION
DISTRICT 9

COAL FATAL

REPORT OF INVESTIGATION
(UNDERGROUND COAL MINE)
FATAL FALL OF RIB (OUTBURST) ACCIDENT

Deer Creek Mine (ID No. 42-00121)
Emery Mining Corporation
Huntington, Emery County, Utah

Injured: August 12, 1982
Died: September 6, 1982

by

Robert Baker,
Coal Mine Safety and Health Inspector

and

John Turner,
Coal Mine Safety and Health Inspector

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Originating Office - Mine Safety and Health Administration
P.O. Box 520, Orangeville, Utah 84537
Jensen L. Bishop, Subdistrict Manager

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Abstract of Investigation

U.S. Department of Labor
Mine Safety and Health Administration



Authority—

This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 95-173, as amended by Public Law 95-164.

SECTION A—IDENTIFICATION DATA

1. Title of investigation Fatal Fall of Rib (Outburst) Accident
2. Date MESA investigation started 8-12-82
3. Report release date 11/01/82
4. Mine Deer Creek
5. Mine ID number 42-00121
6. Company Emery Mining Corp.
7. Town, County, State Huntington, Emery, Utah
8. Author(s) Bob Baker, John Turner

SECTION D—ORIGINATING OFFICE

18. Mine Safety and Health Administration
Coal Mine Health and Safety District No. 9
Address P.O. Box 520, Orangeville, UT

SECTION B—MINE INFORMATION

9. Daily production 11,100 tons
10. Surface employment 106
11. Underground employment 622
12. Name of coalbed Blind Canyon
13. Thickness of coalbed 6 - 14 feet

SECTION C—LAST QUARTER INJURY FREQUENCY RATE (HSAC) FOR:

14. Industry 9.49
15. This operation 28.76
16. Training program approved Yes
17. Mine Profile Rating 502

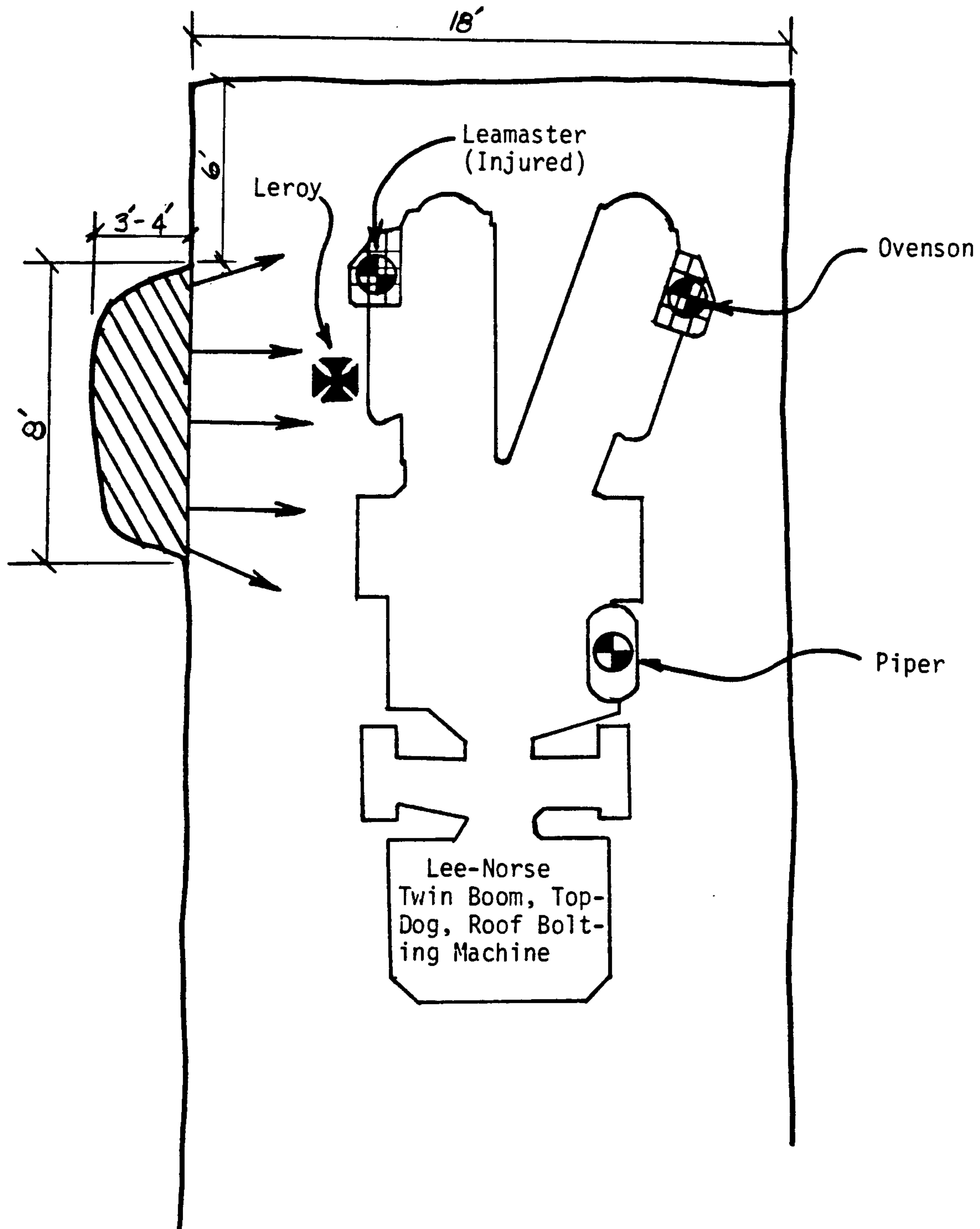
SECTION E—ABSTRACT

On Thursday, August 12, 1982, at 2:15 p.m., a fall of rib (outburst) accident occurred at the face of the No. 2 room, off of crosscut No. 23, in the 9th East A section of Emery Mining Corporation's Deer Creek Mine, resulting in serious injury to Jim K. Leroy, section foreman. Leroy had about 8 years, 3 months of mining experience, and 3 years, 6 months experience as a foreman. The accident occurred as Brett Leamaster, roof bolter operator trainee, assisted by Leroy, roof bolted in the No. 2 room. Without warning, a portion of the left rib, about three to four feet thick, eight feet long, and two to three feet high, burst from the top of the rib, striking Leroy and Leamaster. Due to his injuries and medical complications, Leroy died at 3:00 p.m. on September 6, 1982. The accident occurred due to excessive pressures on the barrier pillar from the 1,400 feet of overburden, and the adjacent mined-out longwall panels.

SECTION F—MINE ORGANIZATION

Company officials:	Name	Address
19. President:	Neal Savage,	P.O. Box 310, Huntington, UT 84528
20. Superintendent:	Jim Atwood	" " " "
21. Safety Director:	Lee Bunderson,	" " " "
22. Principle officer—H&S:	Evert Winder	" " " "
23. Labor Organization:	U.M.W.A., District 22,	P.O. Box 783, Price, UT
24. Chairman—H&S Committee:	Frank Fitszek	

NO. 2 ROOM, OFF CROSSCUT NO. 23



SKETCH OF FATAL
ROOF FALL (OUTBURST) ACCIDENT
Deer Creek Mine
Emery Mining Corporation
Huntington, Emery County, Utah

August 12, 1982

Not to Scale

Commentary

On Thursday, August 12, 1982, the 9th East A section crew, under the supervision of Jim K. Leroy, section foreman, entered the mine at 8:00 a.m., and traveled to the working section via track mounted personnel carrier. After arriving on the section, at about 8:25 a.m., Leroy examined the work areas and assigned duties. Coal production was started, and mining activities continued in the Nos. 1 and 2 rooms, off No. 23 crosscut, without incident until the time of the accident.

The crew stated that bounces had occurred during the shift, while coal was being cut from the face. Due to these bounces, Leroy and the crew decided that no other work should be done at the faces while coal was being mined.

Prior to the accident, a cut of coal was mined from the face in the No. 2 room. The continuous mining machine was trammed from the No. 2 to No. 1 room, and the Lee Norse double boom Top-Dog roof bolting machine brought to the No. 2 room. Roof bolting activities commenced with Brett Leamaster, roof bolter operator trainee, operating the left boom, and Jerry Overson, roof bolter operator, operating the right boom of the bolting machine. Leroy was present on the left side to assist and task train Leamaster, and George Piper, continuous mining machine operator, was seated in the operator's compartment of the bolting machine. The crew had installed three rows of roof bolts at the face, and was working on the fourth row when the accident occurred. Leamaster had installed the first roof bolt on the left side, and was installing the second roof bolt in the fourth row, when, at about 2:15 p.m., the left rib burst, knocking Leamaster to the floor and Leroy against the roof bolting machine. The outburst occurred from the top of the rib about six feet from the face, and was without warning. It measured three to four feet thick, eight feet long, and two to three feet high. Leamaster suffered fractures of both knees, and Leroy received a skull fracture and multiple lacerations and contusions. Leroy later fell into a coma and succumbed at the hospital from his injuries and complications on September 6, 1982 at 3:00 p.m.

Discussion and Evaluation

The investigation revealed the following factors relevant to the occurrence of the accident:

1. The coal seam height in the 9th East "A" pillar section is about 14 feet. Usually about eight feet of coal is mined with two to three feet of top coal left in place. In the accident area, the top coal and two feet of roof rock had been mined. The roof rock was cut down after initial mining of the rooms, and the roof was rebolted.
2. The immediate roof consists of two feet of laminated shale and then sandstone. The overburden in the area is about 1,400 feet.

3. The 9th East "A" pillar section is located adjacent and parallel to the 8th East active longwall section. Mining in the longwall section had retreated about 850 feet outby the room in which the accident occurred. Rooms in the 9th East "A" section were developed toward the longwall section with a 50 foot barrier pillar left between the two sections. Three pillars, 20 feet wide and 72 feet long, were developed between rooms.

4. A second pillar mined area, the 9th East section, is located to the west of the 9th East A section. These two sections are separated by barrier coal which measures from 900 to 1300 feet wide at the point where the accident occurred.

5. Prior to the accident, the section had been experiencing bounces when coal was mined at the face. During these sporadic bounces, coal would fall and sometimes blowout from the left ribs. Due to these bounces, the entry width had increased from 18 to 28 feet, about 30 feet outby the accident area.

6. Since the bounces occurred mainly when coal was being mined, the section foreman, Jim Leroy, and the crew decided to stop mining when they roof bolted. When the accident occurred the crew was roof bolting in the No. 2 room, and no mining was being done on the section.

7. The outburst occurred on the left rib of the No. 2 room about six feet from the face. It measured eight feet in length, three to four feet thick, and about two to three feet high. The outburst occurred at the top of the rib and consisted mainly of the laminated shale from the top of the coal seam. Methane was not detected in the No. 2 room after the outburst.

8. The approved roof control plan was being followed in the No. 2 room at the time of the accident. During the investigation, the plan was amended to require that six foot long resin bolts with mats be installed on four foot centers in areas where cap rock was encountered, and 16 to 24 inches of top coal left in place as additional roof support.

9. Prior to the accident, and due to severe bounces in the adjacent rooms, pillar sizes were reduced from 80 to 40 foot centers in an attempt to alleviate a pressure buildup on the pillars. As mining advanced, top coal began to break up and fall between the bolts and mats. The fractured top coal was taken down and the immediate roof (cap rock) was rebolted. The cap rock, however, also began to break and fall between the bolts and mats. Because of this condition, management elected to take the cap rock down and bolt the main roof.


Findings of Fact


No violations of Title 30, CFR, were observed which caused or contributed to the occurrence of this accident.

Conclusion

The accident occurred due to excessive pressures on the barrier pillar from the 1400 feet of overburden, and the adjacent mined-out longwall panels. A contributing factor to the severity of the accident was the removal of the top coal and cap rock from the roof in the No. 2 room. This allowed the exposed cap rock in the rib to blow out when the outburst occurred.


Jensen L. Bishop
Price Subdistrict Manager


Robert Baker
Coal Mine Safety & Health Inspector


John Turner
Coal Mine Safety & Health Inspector

Appendix

List of persons furnishing information and/or present during the investigation:

Emery Mining Corporation Officials

Don Johnson	General Mine Foreman
Jim Atwood	General Mine Manager
Bud Critchlow	Production Area Mine Foreman
Neldon Sitterud	Assistant Superintendent
Evert Winder	Safety Manager
Lee Bunderson	Safety Director

Emery Mining Corporation Employees

Jude Brewer	Shuttle Car Operator
Michael Marshall	Shuttle Car Operator
Joseph Crespín	Helper
Curtis V. Taylor	Mechanic
George Piper	Continuous Mining Machine Operator
Buddy Deekepo	Faceman
Jerry Overson	Roof Bolter Operator

United Mine Workers of America Officials

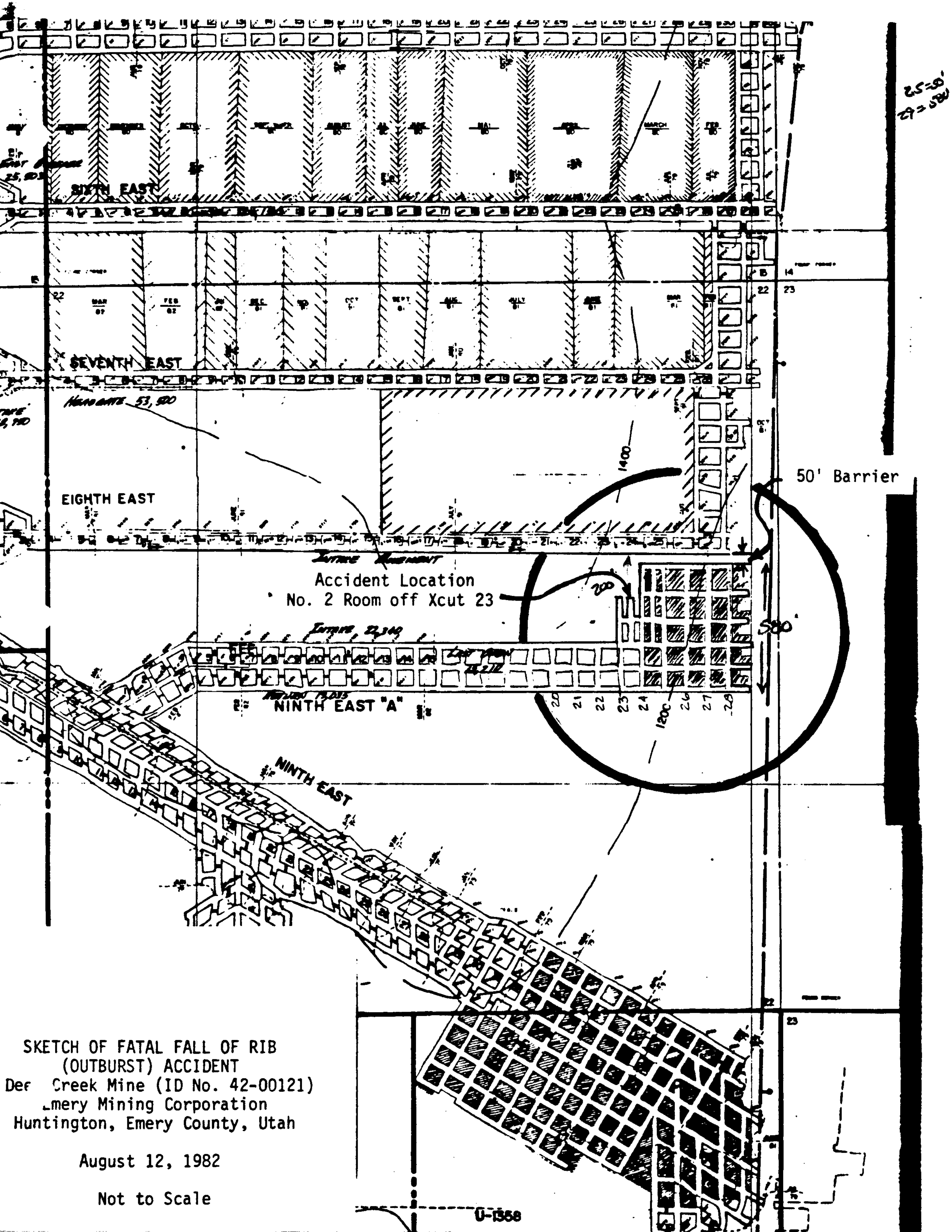
Larry Shiner	District 22 Safety Inspector
Frank Fitszer	Chairman, Health & Safety Committee
George Baker	President, Local

Utah State Department of Mines

Jim Ward	State Mine Inspector
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Mine Safety and Health Administration

John Turner	Coal Mine Safety & Health Inspector
Robert Baker	Coal Mine Safety & Health Inspector



**SECTION A—VICTIM DATA**

1. Name: Jim K. Leroy 2. Sex M ~~X~~ F 3. SSN: 528-84-2920
4. Age: 26 5. Job classification: Section Foreman
6. Experience at this classification: 3½ years 7. Total mining experience: 8¼ years
8. What activity was being performed at time of accident? Task Training & Assisting Roof Bolter
9. Victim's experience at this activity: 3½ years as a supervisor Operator
10. Was victim trained in this task? yes
11. Health and Safety courses/Training received (related to accident) _____ Date received
Annual Retraining 5/1/82, 3/21/81, 9/16/79

SECTION B—SUPERVISOR DATA (supervisor of victim)

12. Name: Don C. Johnson 13. Certified Yes ~~No~~
14. Experience as supervisor: 10 years 15. Total mining experience: 37 years
16. Health and Safety courses/Training received (related to accident) _____ Date received
Annual Retraining 5/8/82, 3/20/81, 12/10/80
17. When was the supervisor last present at accident scene prior to the accident? Noon on August 12, 1982
18. What did he do when he was there? Inspected the section, watched miner crew mine
No. 2 room
19. When was he last in contact with the victim? Noon on August 12, 1982
20. Did he issue instructions relative to the accident? No
21. Was he aware of or did he express an awareness of any unsafe practice or condition? He was concerned with the
amount of rock being mined and decided to drop under top coal after ad-
advancing through intersection. Face areas were being maintained in
workmanlike condition.

Section I (Coal Only)

Jim Leroy - Section Foreman

MSHA and/or State Certification and/or Qualification

Mine ID 42-00121

Date Training Plan Approved	Date Training Received		Date Training Received
* <input checked="" type="checkbox"/> Certified Person (Underground)	<u>5/1/82</u>	<input type="checkbox"/> Dust (Sampling)	<u>N/A</u>
* <input type="checkbox"/> Certified Person (Surface)	<u>N/A</u>	<input type="checkbox"/> Dust (Calibration)	<u>N/A</u>
* <input checked="" type="checkbox"/> Methane & Oxygen Deficiency Testing	<u>5/1/82</u>	<input type="checkbox"/> Noise	<u>N/A</u>
* <input type="checkbox"/> Electrical	<u>N/A</u>	* <input type="checkbox"/> Impoundments	<u>N/A</u>
* <input type="checkbox"/> Energized Surface High Voltage	<u>N/A</u>	* <input type="checkbox"/> Hoisting Engineer	<u>N/A</u>
* Annual Retraining Required			

Section II (Metal-Non-metal and Coal)
MSHA Training Programs Completed

Date of Hire	Date Training Plan Approved		
<u>5/23/74</u>	<u>4/18/79</u>	Required Training (Victim)	Date Training Received
<input type="checkbox"/> New Miner (U.B.)	<u>N/A</u>	<input type="checkbox"/> Required Training (Victim)	Date Training Received
<input type="checkbox"/> New Miner (Sur.)	<u>N/A</u>	<input type="checkbox"/> Hazard Training (U.G.)	<u>N/A</u>
<input type="checkbox"/> Newly Employed Experienced (U.G.)	<u>N/A</u>	<input type="checkbox"/> Hazard Training (Sur.)	<u>N/A</u>
<input type="checkbox"/> Newly Employed Experienced (Sur.)	<u>N/A</u>		
<input type="checkbox"/> Annual Refresher (U.G.)	<u>5/1/82</u>	Task Training Specify Type:	
<input type="checkbox"/> Annual Refresher (Sur.)	<u>N/A</u>		

Section III

Company Training Program Completed:

Training	OJT/Formal	Instructor	Date Completed
	<u>N/A</u>		

Section IV

DID VICTIM HAVE TRAINING SPECIFICALLY RELATED TO THE TASK BEING PERFORMED
AT THE TIME OF THE ACCIDENT?

☒ YES ☐ NO WHEN? 5/1/82

BY WHOM? _____ HOW WAS TRAINING GIVEN? Classroom

Section V

RECOMMEND TRAINING PLAN EVALUATION BY EDUCATION & TRAINING OFFICE

☐ YES ☒ NO